

wherein:

PUG is a photographically useful group;

LINK 1 and LINK 2 are linking groups;

TIME is a timing group;

l is 0 or 1;

m is 0, 1, or 2;

n is 0 or 1;

Y is C, N, O or S;

X is a substituted or unsubstituted aryl group or an electron-withdrawing group;

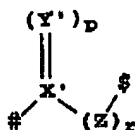
W is hydrogen, halogen, or a substituted or unsubstituted alkyl, cycloalkyl, aryl or heterocyclic group, or W can combine with T or R₁₂ to form a ring, w is 0 to 3 when Y is C, w is 0-2 when Y is N, and w is 0-1 when Y is O or S, when w is 2, the two W groups can combine to form a ring, and when w is 3, two W groups can combine to form a ring or three W groups can combine to form a bicyclic substituent;

R₁₂ is hydrogen, or a substituted or unsubstituted alkyl, cycloalkyl, aryl or heterocyclic group or R₁₂ can combine with T to form a ring, in which ring the two carbon atoms to which T and R₁₂ are, respectively, attached are linked by a single bond;

T is a substituted or unsubstituted alkyl, cycloalkyl, aryl or six-membered heterocyclic group, t is 0, 1, or 2, with the proviso that when X is a cyano or sulfonyl group t is 1 or 2, when t is 2 the two T groups can combine to form a ring;

X is divalent, a is 1 or 2, and b is 1;

where LINK 1 and LINK 2 is independently of Structure II:



II

wherein

X' represents carbon or sulfur;

Y' represents oxygen, sulfur or N-R₁, where R₁ is substituted or unsubstituted alkyl or substituted or unsubstituted aryl;

p is 1 or 2;

Z represents carbon, oxygen or sulfur;

r is 0 or 1;

with the proviso that when X is carbon, both p and r are 1, when X is sulfur, Y is oxygen, p is 2 and r is 0;

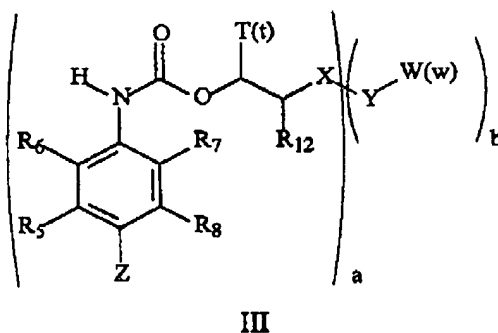
denotes the bond to PUG (for LINK 1) or TIME (for LINK 2);

\$ denotes the bond to TIME (for LINK 1) or T_(i) substituted carbon (for LINK 2);

and

wherein PUG is a development inhibitor, bleach accelerator, bleach inhibitor, inhibitor releasing developer, dye precursor, developing agent, silver ion fixing agent, electron transfer agent, silver halide solvent, silver halide complexing agent, reductone, image toner, pre-processing or post-processing image stabilizer, nucleator, or precursor thereof.

11. (Fourthly Amended) A photographic, photothermographic, or thermographic imaging element comprising an imaging layer having associated therewith a compound of Structure III:



wherein:

Z is OH or NR₂R₃, where R₂ and R₃ are independently hydrogen or a substituted or unsubstituted alkyl group or R₂ and R₃ are connected to form a ring;

R₅, R₆, R₇, and R₈ are independently hydrogen, halogen, hydroxy, amino, alkoxy, carbonamido, sulfonamido, alkylsulfonamido or alkyl, or R₅ can connect with R₃ or R₆ and/or R₈ can connect to R₂ or R₇ to form a ring;

T is a substituted or unsubstituted alkyl cycloalkyl, aryl or six-membered heterocyclic group, t is 0, 1, or 2, with the proviso that when X is a cyano or sulfonyl group, t is 1 or 2, when t is 2, the two T groups can combine to form a ring;

R₁₂ is hydrogen, or a substituted or unsubstituted alkyl, cycloalkyl, aryl or heterocyclic group or R₁₂ can combine with T or W to form a ring, in which ring the two carbon atoms to which T and R₁₂ are, respectively, attached are linked by a single bond;

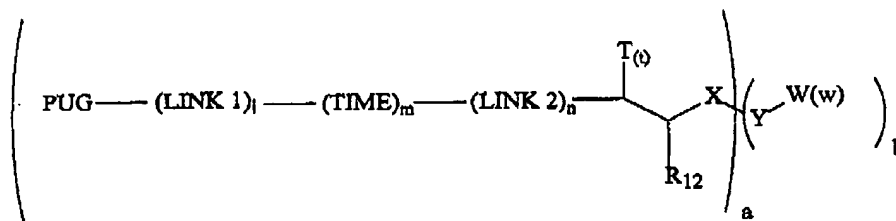
X is a substituted or unsubstituted aryl group or an electron-withdrawing group;

Y is C, N, O or S;

X is divalent, a is 1 or 2, and b is 1;

W is hydrogen, halogen, or a substituted or unsubstituted alkyl, cycloalkyl, aryl or heterocyclic group, or W can combine with T to form a ring, w is 0 to 3 when Y is C, w is 0-2 when Y is N, and w is 0-1 when Y is O or S, when w is 2, the two W groups can combine to form a ring, and when w is 3, two W groups can combine to form a ring or three W groups can combine to form [an aryl group or] a bicyclic substituent.

42. (Twice Amended) A photographic, photothermographic, or thermographic imaging element comprising an imaging layer having associated therewith a compound of Structure I:



I

wherein:

PUG is a developing agent;

LINK 1 and LINK 2 are linking groups;

TIME is a timing group;

l is 0 or 1;

m is 0, 1, or 2;

n is 0 or 1;

Y is C, N, O or S;

X is a substituted or unsubstituted aryl group or an electron-withdrawing group;

W is hydrogen, halogen, or a substituted or unsubstituted alkyl, cycloalkyl, aryl or heterocyclic group, or W can combine with T or R₁₂ to form a ring, w is 0 to 3 when Y is C, w is 0-2 when Y is N, and w is 0-1 when Y is O or S, when w is 2, the two W groups can combine to form a ring, and when w is 3, two W groups can combine to form a ring or three W groups can combine to form [an aryl group or] a bicyclic substituent;

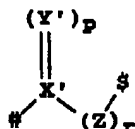
R₁₂ is hydrogen, or a substituted or unsubstituted alkyl, cycloalkyl, aryl or heterocyclic group or R₁₂ can combine with T to form a ring, in which ring the two carbon atoms to which T and R₁₂ are, respectively, attached are linked by a single bond;

T is a substituted or unsubstituted alkyl cycloalkyl, aryl or six-membered heterocyclic group, t is 0, 1, or 2, with the proviso that when X is a cyano or

sulfonyl group t is 1 or 2, when t is 2 the two T groups can combine to form a ring;

X is divalent, a is 1 or 2, and b is 1;

where LINK 1 and LINK 2 is independently of Structure II:



II

wherein

X represents carbon or sulfur;

Y represents oxygen, sulfur or N-R₁, where R₁ is substituted or unsubstituted alkyl or substituted or unsubstituted aryl;

p is 1 or 2;

Z represents carbon, oxygen or sulfur;

r is 0 or 1;

with the proviso that when X is carbon, both p and r are 1, when X is sulfur, Y is oxygen, p is 2 and r is 0;

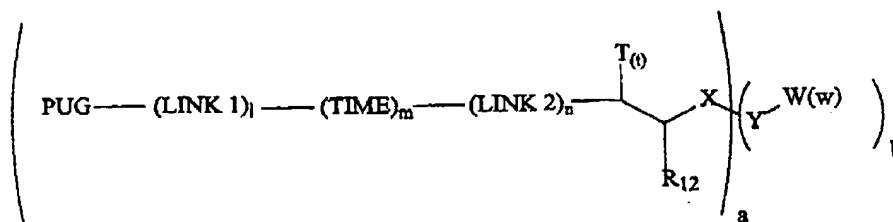
denotes the bond to PUG (for LINK 1) or TIME (for LINK 2);

\$ denotes the bond to TIME (for LINK 1) or T_(t) substituted carbon (for LINK 2). --

Please add the following new claim 46 as set forth below:

46. A photographic, photothermographic, or thermographic imaging element comprising an imaging layer having associated therewith a compound of Structure I:

44



I

wherein:

PUG is a developing agent;

LINK 1 and LINK 2 are linking groups;

TIME is a timing group;

l is 0 or 1;

m is 0, 1, or 2;

n is 0 or 1;

Y is C, N, O or S;

X is a substituted or unsubstituted aryl group or an electron-withdrawing group;

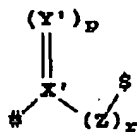
W is hydrogen, halogen, or a substituted or unsubstituted alkyl, cycloalkyl, aryl or heterocyclic group, or W can combine with T or R₁₂ to form a ring, w is 0 to 3 when Y is C, w is 0-2 when Y is N, and w is 0-1 when Y is O or S, when w is 2, the two W groups can combine to form a ring, and when w is 3, two W groups can combine to form a ring or three W groups can combine to form [an aryl group or] a bicyclic substituent;

R₁₂ is hydrogen, or a substituted or unsubstituted alkyl, cycloalkyl, aryl or heterocyclic group or R₁₂ can combine with T to form a ring, in which ring the two carbon atoms to which T and R₁₂ are, respectively, attached are linked by a single bond;

T is a substituted or unsubstituted alkyl cycloalkyl, aryl or six-membered heterocyclic group, t is 0, 1, or 2, with the proviso that when X is a cyano or sulfonyl group t is 1 or 2, when t is 2 the two T groups can combine to form a ring;

X is divalent, a is 2, and b is 1;

where LINK 1 and LINK 2 is independently of Structure II:



II

wherein

X represents carbon or sulfur;

Y represents oxygen, sulfur or N-R₁, where R₁ is substituted or unsubstituted alkyl or substituted or unsubstituted aryl;

p is 1 or 2;

Z represents carbon, oxygen or sulfur;

r is 0 or 1;

with the proviso that when X is carbon, both p and r are 1, when X is sulfur, Y is oxygen, p is 2 and r is 0;

denotes the bond to PUG (for LINK 1) or TIME (for LINK 2);

\$ denotes the bond to TIME (for LINK 1) or T₍₁₎ substituted carbon (for LINK 2). --